

PROJECT DESCRIPTION

1. GENERAL

This project involves the installation of a new Traffic Control Signal with street lighting at the intersection of MD 331 (Dover Road) and Teal Drive / Industrial Park Road in Talbot County. MD 331 is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA four-phase, fully-actuated mode, with the MD 331 approaches running concurrently. The Teal Drive / Industrial Park Road approaches shall run concurrently.
- A full-traffic-actuated, eight-phase controller with two (2) four-channel, rack mount loop detector amplifiers, detector rack power supply and associated harnesses housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

EQUIPMENT LISTS (CON'T.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
8016	2 EA	Furnish and install microloop probe set with 500 ft. lead -in.
8020	1 EA.	Install controller and cabinet.
8021	365 L.F.	Furnish and install sawcut for signal (loop detector).
8022	25 L.F.	Furnish and install 1" galvanized steel electrical conduit (detector wire sleeve).
8023	15 L.F.	Furnish and install 1" liquid tight flexible non-metallic electrical conduit (detector wire sleeve).
8024	4 L.F.	Furnish and install 2" PVC electrical conduit bend (schedule 80) (trenched)
8027	580 L.F.	Furnish and install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
8030	65 L.F.	Furnish and install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
8032	155 L.F.	Furnish and install 4" polyvinyl chloride electrical conduit (Schedule 80) (bored).
8033	10 EA.	Furnish and install electrical handhole.
8034	5 EA.	Furnish and install ground rod (3/4" dia. x 10 ft).
8040	1455 L.F.	Furnish and install loop wire (No. 14 A.W.G.) encased in 1/4" flexible tubing.
8041	570 L.F.	Furnish and install 2-conductor electrical cable (No. 14 A.W.G.) (aluminum shielded).
8044	100 L.F.	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).
8045	1200 L.F.	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).
8046	535 L.F.	Furnish and install 2-conductor electrical cable (No. 12 A.W.G.)
8048	300 L.F.	Furnish and install No. 6 A.W.G. stranded bare copper ground wire.
8049	45 L.F.	Furnish and install 1-conductor electrical cable (No. 4 A.W.G.) THHN/THWN.
8050	72 L.F.	Furnish and install wood sign supports (4" x 4").
8052	36 S.F.	Install ground mounted sign.
8053	71 S.F.	Install overhead sign.
8055	2 EA.	Furnish and install 250W-HPS luminaire with photo cell.
8056	2 EA.	Furnish and install lighting bracket arm for traffic signal structure.
8066	1 EA.	Furnish and install control and distribution equipment.
8076	2 EA.	Furnish and install 27' mast arm pole with 38' mast arm (out to 30') four anchor bolts 1 1/2" x 90".
8077	2 EA.	Furnish and install 27' mast arm pole with 50' mast arm - four anchor bolts 1 3/4" x 90".
8084	24 EA	Furnish and install 12" vehicular traffic signal head section.
8085	6 EA	Furnish and install 8" vehicular traffic signal head section.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	G
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST

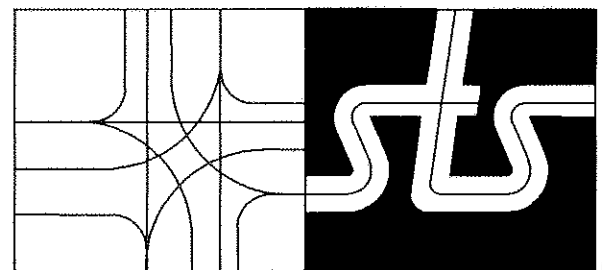
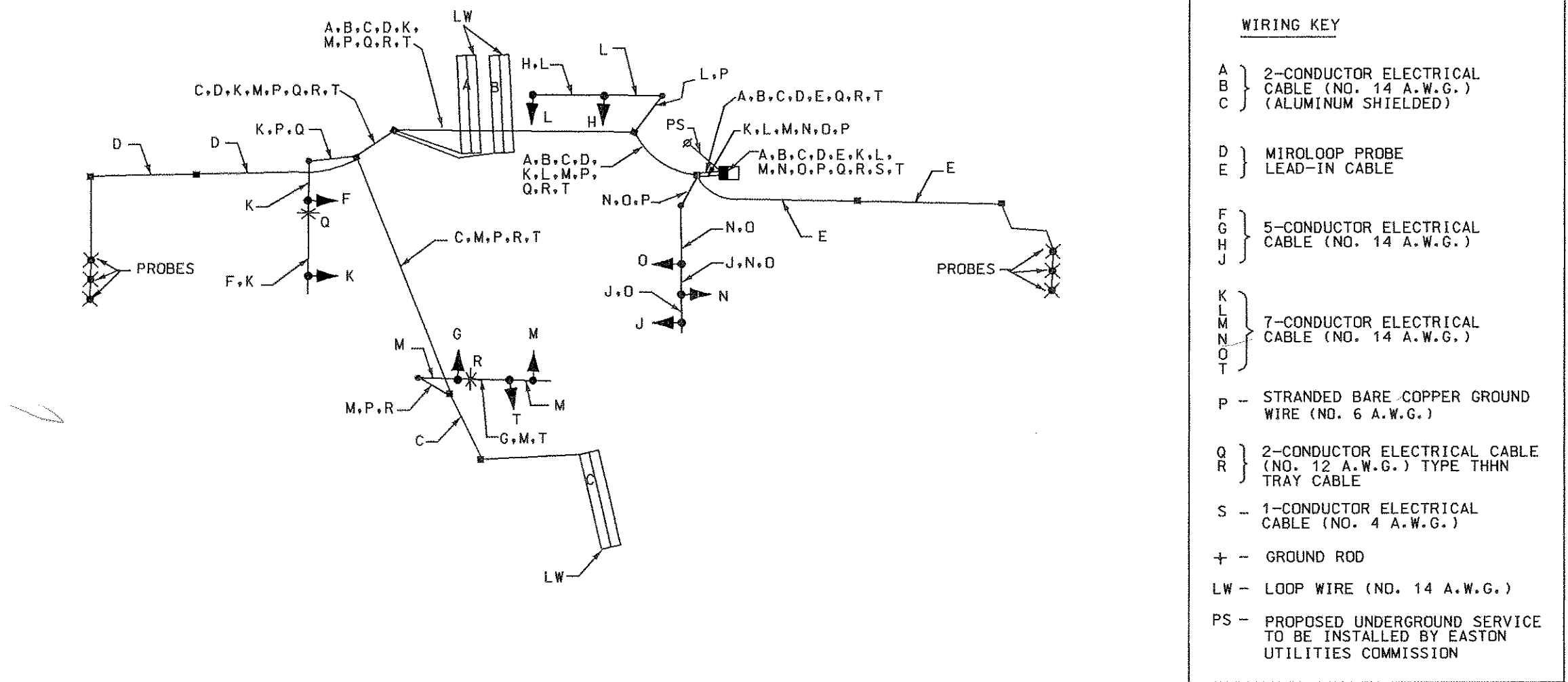
A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9081	1 Each	Eight-phase, full-traffic-actuated, solid state digital controller with two (2) 4-channel, rack mount loop detector amplifiers, detector rack power supply, Intersection Monitor with battery back-up for phone drop and associated harnesses housed in a NEMA size "6" base-mounted cabinet.
9089	44 S.F.	Sheet aluminum signs to consist of:  4 EA W3-3 NEW "SIGNAL AHEAD" sign, (36" x 36") ground mounted with hardware.  1 EA R3-5 "Right Only" sign (30"x36") mast arm mounted
9090	63 S.F.	Sheet aluminum signs to consist of:  1 EA D3-2 " Left Arrow, Teal Dr/ Industrial Pk Rd, Right Arrow " sign, (variable x 32") mast arm mounted.  1 EA D3-2 " Left Arrow, Industrial Pk Rd/ Teal Rd, Right Arrow" sign, (variable x 32") mast arm mounted.  2 EA D3-2 " Dover Rd " sign, (variable x 16") mast arm mounted.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA.	Maintenance of traffic.
2001	3 C.Y.	Test pit excavation.
2004	2 C.Y.	Class 2 excavation
5001	400 L.F.	Furnish and install 5" yellow, heat applied permanent preformed thermoplastic pavement marking material.
5002	300 L.F.	Furnish and install 5" white, heat applied permanent preformed thermoplastic pavement marking material.
5004	90 L.F.	Furnish and install 24" white, heat applied permanent preformed thermoplastic pavement marking material.
5006	2 EA	Furnish and install heat applied permanent preformed thermoplastic pavement marking arrow (left).
5007	360 L.F.	Remove existing pavement markings.
8001	14 C.Y.	Furnish and install concrete foundation.

WIRING DIAGRAM



Gateway International  
1302 Concourse Drive, Suite 104  
Linthicum, Maryland 21090  
Ph (410) 859-3553  
Fax (410) 859-3579

TA-28GLDGN

REVISIONS

APPROVALS

ASST. CHIEF, TEDD SECTION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION

MD 331 AND TEAL DRIVE / INDUSTRIAL PARK ROAD

DRAWN BY: E. MILESKEY

CHECK BY: R. R. ZACHERL

DATE: 7-21-99

SCALE: N/A

COUNTY: TALBOT

LOG MILE: 20033103.57

F.A.P. NO. AC-STPG-0005(587)E

S.H.A. NO. TA06AS21B52

TS NO.

3925

T.I.M.S. NO.

D-295

SHEET NO.

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